

In the Claims:

1. (Currently amended) An aqueous chemical mechanical planarizing composition comprising:

an oxidizer for promoting barrier removal;

an abrasive;

an inhibitor for decreasing removal of a metal interconnect; and

a water soluble polymaleic acid~~carboxylic acid~~ polymer having at least one repeat unit of the polymer comprising at least two carboxylic acid functionalities and wherein the chemical mechanical planarizing composition has a pH of less than 4 adjusted with an inorganic pH adjusting agent, the inorganic pH adjusting agent being an acid; and a tantalum nitride removal rate of at least eighty percent of copper removal rate at a pad pressure of 13.8 kPa.

2. (Currently amended) The composition of Claim 1, wherein the carboxylic acid
polymer~~polymaleic acid~~ comprises a homopolymer or a copolymer.

3. Cancelled.

4. (Previously presented) The composition of Claim 1, having a pH of 1.5 to less than 4.

5. (Currently amended) An aqueous chemical mechanical planarizing composition comprising:

0.05 to 15 wt% abrasive;

0.1 to 10 wt% oxidizing agent;

0.0025 to 2 wt% of benzotriazole; and

0.01 to 5 wt% of a water soluble polymaleic acid~~carboxylic acid~~ polymer, wherein at least one repeat unit of the polymer has at least two carboxylic acid functionalities, and wherein the pH of the chemical mechanical planarizing composition is less than 4 adjusted with an inorganic pH adjusting agent, the inorganic pH adjusting agent including an acid selected from nitric acid, sulfuric acid, hydrochloric acid and phosphoric acid; and a tantalum nitride removal rate of at least ninety percent of copper removal rate at a pad pressure of 13.8 kPa.

6. (Currently amended) The composition of Claim 5, wherein the carboxylic acid~~polymer~~
polymaleic acid comprises a homopolymer or a copolymer.

7. Cancelled.

8. (Withdrawn-currently amended) A method for planarizing a semiconductor wafer comprising:

applying an aqueous chemical mechanical planarizing composition to the wafer, wherein the composition comprises a water soluble polymaleic acidcarboxylic acid polymer having at least one repeat unit of the polymer comprising at least two carboxylic acid functionalities; an abrasive; an oxidizer for promoting barrier removal; and a corrosion inhibitor for limiting removal of the interconnect metal, wherein the chemical mechanical planarizing composition has a pH of less than 4 adjusted with an inorganic pH adjusting agent, the inorganic pH adjusting agent being an acid; and

polishing the semiconductor wafer, wherein the chemical mechanical planarizing composition has a tantalum nitride removal rate of at least eighty percent of copper removal rate at a pad pressure of 13.8 kPa.

9. (Withdrawn-currently amended) A method for planarizing a semiconductor wafer comprising:

applying an aqueous chemical mechanical planarizing composition to the wafer, wherein the composition comprises 0.05 to 15 wt% abrasive; 0.1 to 10 wt% oxidizing agent; and 0.0025 to 2 wt% of benzotriazole; and 0.01 to 5 wt% of a water soluble polymaleic acidcarboxylic acid polymer, wherein at least one repeat unit of the polymer has at least two carboxylic acid functionalities, and wherein the pH of the chemical mechanical planarizing composition is less than 4 adjusted with an inorganic pH adjusting agent, the inorganic pH adjusting agent including an acid selected from nitric acid, sulfuric acid, hydrochloric acid and phosphoric acid; and

polishing the semiconductor wafer at a pad pressure less than or equal to about 21.7 kPa, wherein the chemical mechanical planarizing composition has a tantalum nitride to copper selectivity of at least eighty percent of copper removal rate.

10. Cancelled.